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BEFORE THE
HEALTH, EDUCATION, LABOR AND PENSIONS COMMITTEE
U.S. SENATE**

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Good afternoon. I am pleased to appear before the Health, Education, Labor and Pensions Committee this afternoon to address the cleanup of asbestos contamination in Libby, Montana, and the Agency's efforts to identify other sites nationwide with potential asbestos contamination. EPA views the Libby asbestos site as one of the most significant Superfund sites nationally, and the Agency is committed to working with our partners to take all steps necessary to protect human health and the environment in Libby and related sites.

Background

Libby is a small town of about 2,600 residents in northwest Montana. Approximately 10,000 more people live in about 2000 homes located in the surrounding valley. Between 1924 and 1991, a vermiculite mine owned originally by the Zonolite Corporation and purchased by W.R. Grace in 1963, was one of Libby's largest employers. The now-closed vermiculite mine once produced 80% of the world's vermiculite. The processed vermiculite ore mined in Libby has been used as a soil conditioner and in the manufacture of insulation, packaging and other materials.

Over the years it operated, the mine and related facilities employed a total of about 2000 workers in Libby. The ore was milled and beneficiated (partly cleaned of impurities) on the mine property. After milling, the ore went to three locations in or near Libby to prepare it for distribution. It was transported to a screening plant at which the ore was graded prior to shipment by railroad to other processing plants around the country. It also went to one of two processing plants which operated during different periods in the mine's history, prior to placement in bags for shipment.

One of the impurities in the vermiculite ore was asbestos. Before 1991, the mill at the Libby mine reportedly emitted up to 5,000 pounds/day of asbestos to the atmosphere. Contamination resulting from historical operation of the mine and related processing facilities has led to serious public health concerns among members of the Libby community. Asbestos health effects include malignant mesothelioma, a potentially fatal cancer of the chest cavity which in many cases is associated with asbestos exposure. Further, asbestos exposure may lead

to an increased risk of all lung cancers, particularly when combined with smoking. Asbestos exposure can also cause asbestosis, a scarring of the lung tissue that can be fatal.

Investigations and Cleanup Related to Libby Asbestos

EPA is working closely with our federal partners to address the asbestos contamination and related public health concerns in Libby and other communities across the country. On November 22, 1999, EPA, the Agency for Toxic Substances and Disease Registry (ATSDR) and the U.S. Public Health Service (PHS) mobilized an emergency response team to work in Libby. Coordinating closely with the community, the team conducted an initial inspection of the former mine and processing facility, held interviews with local physicians, and collected environmental samples in order to determine the need for environmental or medical investigations. The team discovered significantly elevated incidence of asbestos-related disease in Libby, as well as evidence of asbestos contamination in several areas within the town. EPA and our partners determined that both environmental investigations and medical investigations were necessary in Libby.

EPA is currently taking action under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund) to protect human health and the environment in Libby. EPA is also using Superfund to assess the need for cleanup at other locations across the country where vermiculite ore from the Libby mine was shipped for processing. Under Superfund, responsible parties are liable for the costs associated with response to the release or threatened release of hazardous substances, including asbestos, into the environment, and Superfund provides the authority to clean up such contamination. EPA has committed over \$30 million of funding in fiscal years 2000-2001 for environmental investigations, cleanup actions and medical investigations in Libby.

Medical Investigations

ATSDR and the PHS, working with the EPA, determined that medical investigations were necessary to determine the magnitude of the health impacts in the Libby community. The medical investigations, which were funded by EPA and led by the PHS and ATSDR, consisted of a morbidity/mortality study, development of a formal epidemiological case series, and health screening. The mortality study for the period 1978-1998 showed that mortality in the Libby community from asbestosis was approximately 40-60 times higher than expected for such a community. ATSDR conducted health screening of roughly 6,200 individuals, including former workers, family members of workers and current and former residents of Libby. Preliminary results of the health screening of these groups showed up to 30% with lung abnormalities. Significantly, more than half of this sample were not former W.R. Grace workers or their family members.

Environmental Investigations and Cleanup

Public health concerns associated with asbestos contamination in Libby, Montana, have required and continue to require emergency cleanup actions under Superfund. Documented,

wide-spread disease and mortality have resulted from exposure to asbestos. Terrain and meteorology which trap airborne particulate matter further exacerbate the problem of exposure to asbestos fibers.

EPA's environmental investigations in Libby have focused on the mine and processing areas, residences, parks and schools. From December 1999 through April 2000, EPA collected samples and conducted interviews to characterize the extent and severity of asbestos contamination in and around the town of Libby. The environmental investigation has included over 5,000 samples taken from all media and a survey of over 6,000 residents of the area. Preliminary results showed that high amounts of asbestos-contaminated vermiculite remained at the mine, the mine road, processing areas, the mine tailings pile/pond, and in residential and shared community areas. EPA is currently in the process of evaluating the potential for asbestos exposure in and around residences, including living areas, yards, and gardens.

In June of 2000, EPA initiated and oversaw cleanup actions at two former processing areas to address the worst asbestos contamination. EPA has since started cleanup actions at the mine road, the high school track and city park facilities where vermiculite ore tailings were found. Cleanup has also started at several residences where piles of vermiculite or contaminated equipment from the mine were found. More cleanups are planned to address elevated levels of asbestos, both at mining facilities and in the community.

Federal agencies have maintained a program of early and meaningful outreach and coordination with the Libby community. This has included meeting frequently with the Libby Community Advisory Group, maintaining a storefront office in an accessible downtown location and frequent one-on-one communication with concerned Libby residents.

The ongoing work of EPA and our partners will help determine how best to complete the long-term remediation in Libby. To date, site investigation and cleanup activities have taken place under Superfund's emergency or Removal authorities. Given the widespread contamination and public health concerns in Libby, it may be appropriate to list the Libby site on the Superfund's National Priorities List of contaminated sites (NPL). EPA understands that the NPL listing decision on the Libby site will require careful consideration of the views of the Governor, state officials and the Libby community. Regardless of the ultimate decision regarding NPL listing, EPA is committed to working with our partners to see that all necessary actions are taken to protect public health in the Libby community.

EPA Investigations and Cleanup Outside of Libby

Between 1924 and 1991, the Libby mine produced 80% of the world's supply of vermiculite. EPA has identified 244 locations across the U.S. that may have received Libby vermiculite for processing and distribution. Of these 244 locations, EPA determined that 81 warranted further sampling. As of early July, EPA determined that 17 of these 81 locations require further investigation by EPA. When it appears that another agency may need to be

involved, EPA shares its findings with other federal or state agencies so that they can determine if additional follow-up is warranted.

One example of a situation warranting a federal / state agency approach is the significant asbestos contamination at the Western Minerals site in Minneapolis, MN. Western Minerals operated as a vermiculite processing facility from 1937 until 1989, during which time it was estimated to have processed over 118,000 tons of vermiculite ore from the Libby, Montana mine. The waste material generated during the processing of vermiculite was made available to the public for use as fill material for driveways and yards. Since September of 2000, EPA and the state of MN have been sampling and removing asbestos contamination at the former plant site and nearby residential yards. EPA and the Minnesota Department of Health (MNDOH) have received many reports of asbestos-related disease in residents who have lived in the predominantly residential area surrounding the facility. An ATSDR-funded survey is being conducted by the MNDOH to determine the magnitude of the health impacts in former workers and nearby residents at the Western Minerals site.

ATSDR is currently working with state health departments to conduct a review of health statistics for asbestos-related disease in areas of former vermiculite processing facilities across the country. EPA will continue to coordinate with ATSDR on this effort to identify any additional locations that may require environmental sampling or cleanup.

Response to Inspector General Report

On March 31, 2001, the EPA Office of Inspector General (IG) issued a report titled, *EPA's Actions Concerning Asbestos-Contaminated Vermiculite in Libby, Montana*.⁶ The IG report focused on EPA's role in addressing asbestos contamination in Libby, as well as EPA's role in regulating asbestos. The IG report concludes that EPA's activities in Libby should continue, and emphasizes the importance of addressing potential asbestos contamination concerns associated with mining and other operations unrelated to Libby. EPA is coordinating closely with the Mine Safety and Health Administration (MSHA) and ATSDR to identify additional asbestos-contaminated sites associated with Libby or otherwise identified that may require cleanup actions under Superfund.

Conclusion

EPA will continue to work closely with our federal and state partners to take the steps necessary to protect the public health of the residents of Libby, Montana, as well as the health of communities outside of Montana that have been impacted by Libby asbestos.

Thank you for the opportunity to appear before you today to discuss cleanup issues associated with asbestos in vermiculite ore from Libby, Montana.